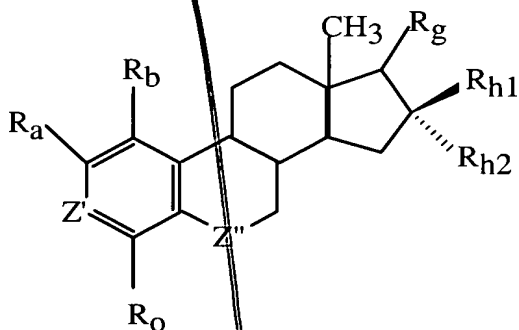


# CLAIMS

We claim:

1. A compound of the general formula:



wherein:

- a)  $R_b$  and  $R_o$  are independently -H, -Cl, -Br, -I, -F, -CN, lower alkyl, -OH, -CH<sub>2</sub>-OH, -NH<sub>2</sub>, or N(R<sub>6</sub>)(R<sub>7</sub>), wherein R<sub>6</sub> and R<sub>7</sub> are independently hydrogen or an alkyl or branched alkyl with up to 6 carbons;
- b)  $R_a$  is -N<sub>3</sub>, -C≡N, -C≡C-R, -C=CH-R, -R-C=CH<sub>2</sub>, -C≡CH, -O-R, -R-R<sub>1</sub>, or -O-R-R<sub>1</sub> where R is a straight or branched alkyl with up to 10 carbons or aralkyl, and R<sub>1</sub> is -OH, -NH<sub>2</sub>, -Cl, -Br, -I, -F or CF<sub>3</sub>;
- c) Z' is >CH, >COH, or >C-R<sub>2</sub>-OH, where R<sub>2</sub> is an alkyl or branched alkyl with up to 10 carbons or aralkyl;
- d) >C-R<sub>g</sub> is >CH<sub>2</sub>, >C(H)-OH, >C=O, >C=N-OH, >C(R<sub>3</sub>)OH, >C=N-OR<sub>3</sub>, >C(H)-NH<sub>2</sub>, >C(H)-NHR<sub>3</sub>, >C(H)-NR<sub>3</sub>R<sub>4</sub>, or >C(H)-C(O)-R<sub>3</sub>, where each R<sub>3</sub> and R<sub>4</sub> is independently an alkyl or branched alkyl with up to 10 carbons or aralkyl;
- e) R<sub>h1</sub> and R<sub>h2</sub> are independently H, or a straight or branched chain alkyl, alkenyl or alkynyl with up to 6 carbons that is

unsubstituted, or substituted with one or more groups selected from a hetero functionality (O-Y, N-Y or S-Y) where Y is H, Me or an alkyl chain up to 6 carbons; a halo functionality (F, Cl, Br or I); an aromatic group optionally substituted with hetero, halo or alkyl; or  $R_{h1}$  and  $R_{h2}$  are independently an aromatic group optionally substituted with hetero, halo or alkyl, provided that both  $R_{h1}$  and  $R_{h2}$  are not H;

f)  $Z''$  is  $>CH_2$ ,  $>C=O$ ,  $>C(H)-OH$ ,  $>C=N-OH$ ,  $>C=N-OR_5$ ,  $>C(H)-C \equiv N$ , or  $>C(H)-NR_5R_5$ , wherein each  $R_5$  is independently hydrogen, an alkyl or branched alkyl with up to 10 carbons or aralkyl;

and wherein all monosubstituted substituents have either an  $\alpha$  or  $\beta$  configuration.

2. The compound of Claim 1, wherein :

$R_b$  and  $R_o$  are H,

$R_a$  is  $OCH_3$

$Z'$  is  $>C-OH$ ,

$>C-R_g$  is  $>C(H)-\beta-OH$ , and

$Z''$  is  $>CH_2$ .

3. The compound of Claim 2, wherein :

$R_{h1}$  and  $R_{h2}$  are independently H and Et.

4. The compound of Claim 2, wherein:

$R_{h1}$  and  $R_{h2}$  are independently H and n-Pr.

5. The compound of Claim 2, wherein:

$R_{h1}$  and  $R_{h2}$  are independently H and i-Bu.

6. The compound of Claim 2, wherein:

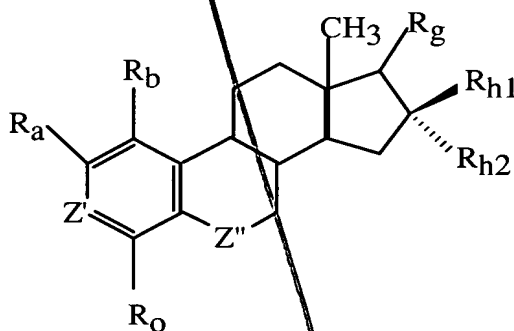
$R_{h1}$  and  $R_{h2}$  are independently H and  $CH_2OH$ .

7. The compound of Claim 2, wherein :  
 $R_{h1}$  and  $R_{h2}$  are independently H and n-Bu.

8. The compound of Claim 2, wherein :  
 $R_{h1}$  and  $R_{h2}$  are independently H and Me.

9. The compound of Claim 2, wherein :  
 $R_{h1}$  and  $R_{h2}$  are independently H and  $(CH_2)_n-C(Me)_2$ .

10. A method of inhibiting angiogenesis comprising administering to an endothelial cell an angiogenesis inhibiting amount of a compound of the general formula:



wherein:

a)  $R_b$  and  $R_o$  are independently -H, -Cl, -Br, -I, -F, -CN, lower alkyl, -OH, - $CH_2OH$ , - $NH_2$ ; or  $N(R_6)(R_7)$ , wherein  $R_6$  and  $R_7$  are independently hydrogen or an alkyl or branched alkyl with up to 6 carbons;

b)  $R_a$  is - $N_3$ , - $C \equiv N$ , - $C \equiv C-R$ , - $C=CH-R$ , - $R-C=CH_2$ , - $C \equiv CH$ , -O-R, -R- $R_1$ , or -O-R- $R_1$  where R is a straight or branched alkyl with up to 10 carbons or aralkyl, and  $R_1$  is -OH, - $NH_2$ , -Cl, -Br, -I, -F or  $CF_3$ ;

c) Z' is  $>\text{CH}$ ,  $>\text{COH}$ , or  $>\text{C-R}_2\text{-OH}$ , where  $\text{R}_2$  is an alkyl or

d)  $>C-R_G$  is  $>CH_2$ ,  $>C(H)-OH$ ,  $>C=O$ ,  $>C=N-OH$ ,  $>C(R_3)OH$ ,

e)  $R_{h_1}$  and  $R_{h_2}$  are independently H, or a straight or branched

f) Z'' is  $>\text{CH}_2$ ,  $>\text{C}=\text{O}$ ,  $>\text{C}(\text{H})-\text{OH}$ ,  $>\text{C}=\text{N}-\text{OH}$ ,  $>\text{C}=\text{N}-\text{OR}_5$ ,

and wherein all monosubstituted substituents have either an  $\alpha$